



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0766; Product Identifier 2017-NM-046-AD; Amendment 39-19203; AD 2018-04-08]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the gore web lap splices of the aft pressure bulkhead are subject to widespread fatigue damage (WFD). This AD requires repetitive inspections of the gore webs, gore web lap splices, and repair webs, as applicable, of the aft pressure bulkhead, and applicable on-condition actions. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0766.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0766; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: George Garrido, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5232; fax: 562-627-5210; email: george.garrido@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. The NPRM published in the Federal Register on August 11, 2017 (82 FR 37546). The NPRM was prompted by an evaluation by the DAH indicating that the gore web lap splices of the aft pressure bulkhead are subject to WFD. The NPRM proposed to require repetitive inspections of the gore webs, gore web lap splices, and repair webs, as applicable, of the aft pressure bulkhead, and applicable on-condition actions.

We are issuing this AD to detect and correct cracking in the gore webs, gore web lap splices, and repair webs of the aft pressure bulkhead, which could result in possible rapid decompression and loss of structural integrity.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Effect of Winglets on Accomplishment of the Proposed Actions

Aviation Partners Boeing stated that accomplishing the Supplemental Type Certificate (STC) ST01219SE does not affect the actions specified in the NPRM.

We concur with the commenter. We have redesignated paragraph (c) of the proposed AD as paragraph (c)(1) of this AD and added paragraph (c)(2) to this AD to state that installation of STC ST01219SE does not affect the ability to accomplish the

actions required by this AD. Therefore, for airplanes on which STC ST01219SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

Request to Clarify “Related AD” Section

Boeing recommended that a statement be added to the “Related AD” section of the NPRM to provide clarification of the effect of the proposed AD on the requirements of paragraph (o) of AD 2012-18-13 R1, Amendment 39-17429 (78 FR 27020, May 9, 2013) (“AD 2012-18-13 R1”). Boeing asserted that the “Related AD” section could be misinterpreted to imply that the inspections required by the proposed AD are in addition to the requirements of paragraph (o) of AD 2012-18-13 R1.

We agree with the commenter’s rationale, but the “Related AD” section is not included in this final rule. Therefore, no change has been made.

Request to Address the Termination of AD 2012-18-13 R1

Boeing requested a clarification that actions required by the proposed AD terminate the requirements of paragraph (o) of AD 2012-18-13 R1. Boeing asserted that the actions of Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, supersede the actions of Boeing Alert Service Bulletin 737-53A1214, Revision 4, dated December 16, 2011, which are mandated by paragraph (o) of AD 2012-18-13 R1.

All Nippon Airways (ANA) also requested clarification regarding termination of the requirements of paragraph (o) of AD 2012-18-13 R1. ANA stated that, because the compliance time is changed to “after the effective date of this AD” in the proposed AD, the inspections and corrective actions required by paragraph (o) of AD 2012-18-13 R1 may be terminated as long as the inspections for Zone 1, as specified in Boeing Alert

Service Bulletin 737-53A1355, dated March 10, 2017, have been done within the changed compliance time.

We agree with the requests for clarification. We have added the requested terminating action information as paragraph (i) of this AD and redesignated subsequent paragraphs.

Request to Clarify the Zone 2 Definition

Boeing requested a clarification of the definition of Zone 2 in the “Related Service Information under 1 CFR part 51” paragraph of the NPRM. Boeing observed that the definition given could be misleading because it does not specify that Zone 2 contains only the gore web lap splices outside the apex area.

We agree and have added the phrase “outside the apex area” to the specified paragraph of this final rule.

Clarification of Compliance Exception

We have revised the compliance exception in paragraph (j)(1) of this AD to clarify that where Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017. The service information describes procedures for repetitive inspections of the gore web in Zone 1 (i.e., inspections around fastener locations in the gore web lap splices and around fastener locations in the apex area outside the gore web lap splices) and gore web lap splices in Zone 2 (i.e., inspections around fastener locations in the gore web lap splices outside the apex area) of the aft pressure bulkhead, and applicable on-condition actions. The service information also describes, for airplanes with an existing single gore web repair, procedures for repetitive inspections of the gore web (i.e., inspections around fastener locations in the gore web lap splices) and repair webs (i.e., inspections around fastener locations in the gore web lap splices and around fastener locations in the apex area outside the gore web lap splices); and, for airplanes with an existing all gore web repair, procedures for repetitive inspections of the repair webs (i.e., inspections around fastener locations in the repair gore web lap splices and around fastener locations in the apex area outside the repair gore web lap splices); and procedures for applicable on-condition actions. This service information is reasonably available because the interested

parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 281 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	46 work-hours X \$85 per hour = \$3,910 per inspection cycle	\$0	\$3,910 per inspection cycle	\$1,098,710 per inspection cycle

We estimate the following costs to do any necessary on-condition actions that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these on-condition actions:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Inspection of previous single gore web repair	8 work-hours X \$85 per hour = \$680	\$0	\$680
Inspection of previous all gore web repair	10 work-hours X \$85 per hour = \$850	\$0	\$850

We have received no definitive data that would enable us to provide cost estimates for the repairs specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-04-08 The Boeing Company: Amendment 39-19203 ; Docket No. FAA-2017-0766; Product Identifier 2017-NM-046-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2012-18-13 R1, Amendment 39-17429 (78 FR 27020, May 9, 2013) (“AD 2012-18-13 R1”).

(c) Applicability

(1) This AD applies to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/EBD1CEC7B301293E86257CB30045557A?OpenDocument&Highlight=st01219se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01219SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the gore web lap splices of the aft pressure bulkhead are subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct cracking in the gore webs, gore web lap splices, and repair webs of the aft pressure bulkhead, which could result in possible rapid decompression and loss of structural integrity.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions for Group 1 Airplanes

For airplanes identified as Group 1 in Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017: Within 120 days after the effective date of this AD, inspect the airplane, using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(h) Actions Required for Compliance

Except as required by paragraph (j) of this AD: For airplanes identified as Group 2 in Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, at the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, do all applicable actions identified as required for compliance (“RC”) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017.

(i) Termination of Requirements of Paragraph (o) of AD 2012-18-13 R1

Accomplishment of the initial inspection for Zone 1, defined in Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, and required by paragraph (h) of this AD terminates the requirements of paragraph (o) of AD 2012-18-13 R1.

(j) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

(2) Although Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017, specifies to contact Boeing for repair instructions, and specifies that action as “RC” (Required for Compliance), this AD requires repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) Except as required by paragraph (j)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(i) and (k)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

For more information about this AD, contact George Garrido, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5232; fax: 562-627-5210; email: george.garrido@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 737-53A1355, dated March 10, 2017.

(ii) Reserved.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on February 14, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.
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